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ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska

1 The Military Role in Alaska's Economy

ALASKA ECONOMIC TRENDS

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The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1983.

P/ Denotes preliminary estimates.

R/ Denotes revised estimates.

THE MILITARY ROLE IN ALASKA'S ECONOMY

By Neal Fried and Greg Huff

Along with fish, and oil, the military has been one of the main driving forces in the economic growth of the State of Alaska. Since World War II the military has filled an important niche in Alaska's economy. Military defense has been and remains one of the state's major "exports"-Alaska exports defense to the rest of the nation. Alaska has the highest concentration of military population in the nation. There is one uniformed military person for every 20 Alaskans while nationally the figure is one for every 168 people.

The military exerts its economic influence on the state in a number of ways. Military personnel spend part of their paychecks in the local economy, the military employs thousands of civilians, the military purchases goods and supplies in the local market, and the military employs local contractors for many of its projects. These funds flow into the economy directly and indirectly supporting thousands of other jobs. In this capacity the military is one of the single largest employers in the state.

In 1983, 22,261 military personnel were stationed in Alaska. The total military population, including civilian employees and dependents, added up to 67,763, 13% of the state's population. This uniformed military figure of 22,261 represents the smallest number of soldiers in the state since the late 1950's. This trend may be reversed in the near future as the Army is considering stationing a light infantry division in Alaska beginning in 1985. If Alaska is chosen, an additional 7,400 soldiers and 360 civilians will arrive. If dependents are included, the state's military related population would increase by approximately 20,000.

During the 1940's and 1950's, the military was a major impetus behind Alaska's economic growth. The uniformed military population peaked at 60,000 in 1945 and then began to drop off through the early 1950's. By the mid-1950's, the number began to climb again with the onset of the Cold War. During the Cold War years the military was making major expansions and additions to their facilities in Alaska, and many contractors and businesses depended on the military for their survival. In 1955, the uniformed military represented 23% of Alaska's population; if dependents and civilians were included it was closer to 40%. During this period of Alaska's economic history it was once estimated that the federal government was responsible for 80% of Alaska's basic employment with military providing the largest share. /1

The easing of tensions in the 1960's brought troop levels down to 30-32,000. During the 1960's and even more so in the 1970's Alaska's

dependency on the military began to wane. The military presence was declining and more importantly Alaska's economy was beginning to diversify, particularly because of the discovery and resulting development of oil at Prudhoe Bay. In 1975, the uniformed military population was 7% of the state's population and total payroll was a mere 11%.

The military's payroll in relation to the total economy's payroll continued to decline despite the fact that in inflation adjusted dollars the military payroll has made gains since 1970. The influence of Alaska's oil funded state government versus the military illustrates the declining importance of the military. A decade ago the military's expenditures in Alaska were $601 million compared to state expenditures of $538 million. In 1983 the state's expenditures, buoyed by giant oil revenues, were almost 3 times as large as the military's despite growing military expenditures.

Though the military's relative importance has declined in Alaska during the past 2 decades it remains one of the larger employers in the state. It provides steady year-round employment to thousands of Alaskans, both directly and indirectly. In 1983, the total U.S. military expenditures budgeted for Alaska reached $1.4 billion with 75% of this total estimated to have been spent in Alaska. /2

Defense construction expenditures in Alaska in 1983 totaled 141.2 million dollars. The proportion of construction expenditures that enters the Alaska income stream varies widely with the type of construction, but it is estimated that approximately 50% of the total construction budget is spent in Alaska. When construction projects are undertaken by Alaskan contractors and labor, construction spending contributes directly to the local economy and to the creation of jobs. Most building material and equipment purchases are made out of state, thus their contribution to the creation of new jobs is far less. Since the early 1960's construction expenditures have been increasing. Construction expenditures as measured by inflation free dollars has nearly doubled over the past 20 years.

The operations and maintenance budget for the military in Alaska amounted to $380 million in 1983. The budget included supplies and equipment, travel, rent, utilities, communications and various other expenses such as laundry and contract technical services. The purchases of services by the military generally has a greater impact on a local economy than does the purchase of goods because services are more often locally owned, while goods are usually produced and purchased outside of Alaska. Of the total operations and maintenance budget, $274 million or 72% is estimated to be spent locally. In real dollars the Alaska military operations and maintenance budgets in Alaska has remained fairly stable through the 1960's but in the 1980's the budgets increased substantially. For example, the 1979 operations and maintenance budget was $218.6 million but had increased to $303.1 million. in 1980.

The military and civil service payroll totaled $675.9 million in 1983. The remaining $219 million of the total military budget falls in the other category and includes retirement benefits and exchange commission purchases (on base contracts for purchase of goods and services). Even after these expenditure figures are adjusted for inflation, the dollars spent have increased over the decade while manpower numbers have fallen.

It is difficult to estimate how much of the total expenditures reach the local economy given the nature of military operations. Military installations are self-sufficient communities partially insulated from the local economy. Most of the soldiers and their dependents live in base housing. (It has been estimated that 15% of the uniformed military live off base.)/3 The thousands of civilians working on base are not usually afforded these benefits and are part of the local economy. Thus, they have a greater economic impact than the uniformed military. Many of the goods and services which the uniformed military receive are either provided or can be purchased on the military installations. The military Postal Exchanges (PX's) and commissaries are retail outlets where military personnel can purchase groceries and merchandise at discounted prices. Medical care, child care, and a variety of other services are provided by the military.

The average annual earnings of the uniformed military is below the statewide average. In 1982 the uniformed military's average annual earnings were 48% below average statewide annual earnings. The federal civilian earnings were closer to the statewide average, measuring 14% below the statewide average. Given the self-sufficient nature of the military and the lower wages the personnel receive, the direct impact on employment and income is less per direct employee than that of other basic sectors in the economy such as oil, state government, and manufacturing.

A multiplier of 1.8 has been calculated to estimate the secondary effects of the military's total expenditures./4 In other words, the military's total expenditures of $1.4 billion in 1983 amounted to $2.5 billion when the multiplier effect of this expenditure is considered. Employment multipliers for the military have been calculated over the years to range from 1.2 to 2.5. If a conservative approach is used, it is estimated that an additional 13,000-15,000 jobs are created throughout Alaska's economy, outside of direct military employment.

The military is playing a stabilizing role in Alaska's economy, helping to offset the seasonality found in many of state's industries. It provides a core of stability to many local economies during periods of extreme economic fluctuation. Though its role has diminished in Alaska's economy, it remains one of the state's most important basic industries. This diminishing role may soon be reversed if Alaska is chosen as the stationing point for the light infantry division now under development.

Military Installations in Alaska

Regional

The impacts of the military are not evenly distributed across the state. Some areas have high concentrations of military population while others have little or none. Of the over 50 separate military locations statewide, 10 major defense installations in 6 locations account for 97% of active duty (uniformed) military population. A similar percentage of civilian employees of the Department of Defense, NAF/EXCHANGE personnel and military dependents are located at these 6 locations (See Map).

Two of the largest installations are in Anchorage. Fort Richardson and Elmendorf Air Force Base had 10,527 active duty personnel in 1983 (47% of the total statewide active duty population). In total, Anchorage has 54% of the statewide military associated population, including military civilian employees and dependents.

The Fairbanks area contains the next largest concentration of military population with 29% of the statewide defense related population and 25% of Alaska's uniformed military population. Fort Wainwright and Eielson AFB had an active duty population of 5,841 in 1983. Fort Greely, south of

Military Population for Regions and Selected Census Areas of Alaska
1983

	Uniformed* Military	Civilian Employees** and Dependents
Southcentral	11,784	27,225
Anchorage Borough	10,527	25,931
Kodiak	1,095	N/A
Other Southcentral	162	N/A
Fairbanks	6,656	12,892
Fairbanks North Star Borough	5,841	N/A
S.E. Fairbanks	815	N/A
Southwest	2,538	2,917
Aleutian Islands	2,194	N/A
Bristol Bay	311	N/A
Other Southwest	33	N/A
Interior	473	175
Northwest	51	380
North Slope	13	7
Southeast	746	1,906
Total	22,261	45,502

* Source: Research & Analysis Demographics Section.

** Source: DES/Comptrollers Alaska Air Command.

1/ Impact of Military Spending on the Economy of Alaska, Alaska Air Command, Elmendorf Airforce Base, 1983.

2/ Impact of Military Spending on the Economy of Alaska, Alaska Air Command, Elmendorf Airforce Base, 1983.

3/ Kruze, Jack; Design and Implementation of Alaska 1980 Reapportionment Data Election Effort; University of Alaska, Institute of Social and Economic Research (draft), 1981.

4/ Goldsmith, Scott; Federal Revenues and Spending in Alaska; University of Alaska, Institute of Social and Economic Research, 1981.

Fairbanks and adjacent to Delta Junction, had 714 troops in 1983. In 1983 the Fairbanks bases had 1.6 dependents to every active duty and civilian personnel compared to 1.3 in Anchorage. Together the bases in Anchorage and Fairbanks account for over ¾ of the total statewide military associated population.

The Aleutian Islands uniformed military population accounted for 10% (2,194) of the total statewide military population in 1983. The two primary bases are Shemya Air Force Base and ADAK Naval Station. Other Southwest installations, the largest at King Salmon, brought the Southwest region total active duty population to 2,538 in 1983. Other Southwest military related popluation in 1983 included 1,825 dependents and

ALASKA
HOURS AND EARNINGS
FOR
SELECTED INDUSTRIES 1 2

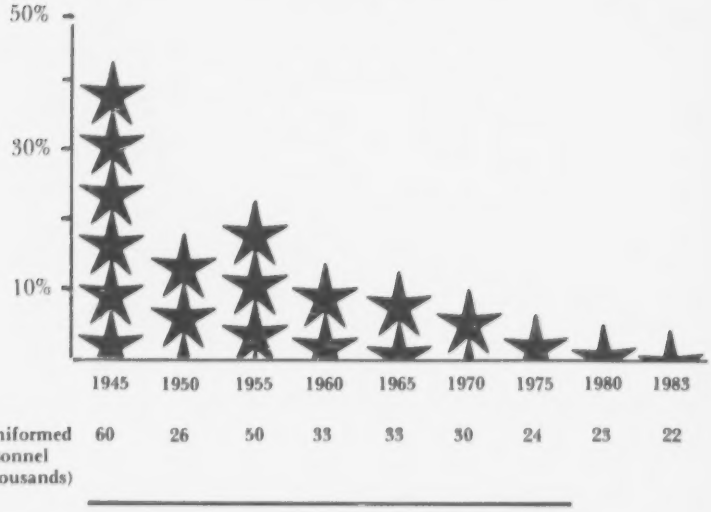
	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	p/ 5/84	r/ 4/84	5/83	p/ 5/84	r/ 4/84	5/83	p/ 5/84	r/ 4/84	5/83
Mining	$24.15	$23.45	$23.63	48.4	49.7	48.7	$1168.86	$1165.47	$1150.78
Contract Construction	24.58	24.72	23.59	40.6	41.2	45.4	997.95	1018.46	1070.99
Manufacturing	13.46	13.78	12.88	33.6	35.3	36.6	452.26	486.43	471.41
Food & Kindred Products	8.62	8.44	7.93	25.8	28.1	31.5	222.40-	237.16	249.80
Lumber & Paper Products	16.52	16.61	16.22	45.0	42.7	43.6	743.40	709.25	707.19
Trans. Comm. & Utilities	15.25	15.55	15.68	38.2	37.3	37.4	582.55	580.02	586.43
Trade	10.58	10.58	10.07	35.2	35.2	34.8	372.42	372.42	350.44
Wholesale	12.26	12.25	11.59	37.1	38.5	38.0	454.85	471.63	440.42
Retail Trade	9.92	9.86	9.41	34.6	34.0	33.6	343.23	335.24	316.18
Fin.-Insurance & R.E.	—	—	—	—	—	—	371.91	370.03	361.31

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor

2/ Excludes eating and drinking establishments

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

Percent of Military of Total Population
1945-1983



approximately 1,000 civilian employees. The Southwest region has a low proportion of dependents to active duty and civilian personnel, but has a high ratio of civilian Department of Defense employees to uniformed personnel.

The Coast Guard station at Kodiak is the largest U.S. Coast Guard installation in the State. The base makes Kodiak the area with the fourth highest concentration of military population in the State. In 1983, the active duty population at Kodiak Island was 1,095, 5% of the statewide total. Dependents of military personnel totaled approximately 1,200.

The Interior region of the state contains the last of Alaska's 10 major military installations. The air base squadron at Galena represents the majority of the 1983 Interior region military population. Active duty personnel at Galena totaled 473 in 1983. Other areas with any significant amount of military associated populations are Juneau, Sitka and Ketchikan. The Coast Guard stations in these areas account for most of the 614 active duty personnel in the Southeast region.

Since 1955 the military population in Alaska has been declining, except for a slight upsurge during the Vietnam War. However, various trends existed regionally. Military populations at installations across the state peaked and fell at different times and some regions have experienced reversals in the declining trends. In Anchorage the military population declined from the mid-1950's into the 1960's. The Vietnam war induced manpower

increases beginning in 1965 and peaked in 1968 at 15,209. Manpower levels have steadily declined since then and by 1983 the active military population was 28% less than in 1968.

Fort Wainwright and Eielson AFB active duty population declined from 9,880 in 1960 to 5,011 in 1976. Since then, the active duty rolls have averaged 5,480. In 1983, the troop levels reached the highest point since 1967. Fort Greely has maintained a fairly stable active duty population ranging from 680 to 850. Kodiak's active duty population peaked in 1965 at 2,287 and bottomed out at the 680 level in 1972 through 1974 when the Navy pulled out of Kodiak Island Station. Buoyed by the Coast Guard, Kodiak's active duty population has grown 26% to 1,095 by 1983. The Aleutian Islands largest troop population since WWII was in 1967 at 3,758. After 1967, the military population fell rather dramatically. By 1978, the number of troops had fallen 40% below 1967 levels. Since then, the military population has stabilized around the 2,100 to 2,200 levels. The active duty ranks in the Yukon-Koyukuk area of the state, which contains Galena AFB, peaked in 1974 at 1,063. The population stayed fairly stable for several years, but fell dramatically in 1979 to 592 and has fluctuated around that level since.

Military associated population in Alaska accounted for 13%, with active duty personnel representing 4.4% of the total statewide population. The areas with the highest proportions of military relative to population are the Aleutian Islands and Bristol Bay Borough. Active duty personnel in these areas comprise 25% of their total population and when combined with civilian employees and dependents, the military represents 55% of the area's total population. The share of total population the military represents has been declining since 1970 when 45% of Aleutian Island population was uniformed military personnel (in 1960 the percentage was 40%). In 1970, the population of Bristol Bay Borough was 38% active duty military personnel.

The area with the next highest proportion of military population to total population is the Fairbanks North Star Borough. In 1983, the active duty population at Fort Wainwright and Eielson AFB represented 9% of the Borough's total population. Combined with civilian employees and dependents total military related employment accounted for 13% of the area's total employment. The proportion of active duty military has been declining since 1950 when it was 23% of total population. In 1970 and 1980 it was 17.8% and 10%, respectively, of total population. The Southeast Fairbanks area (Fort Greely) has a uniformed military population of 13% of the areas population (no dependents data available) which has fallen from 20% in 1970. The Fairbanks area, in recent years, has gained in its share of statewide uniformed military population. In 1980, the bases in the Fairbanks area (including Fort Greely) accounted for 28% of the active duty population statewide and in 1983 rose to 26% but still less than the 31% in 1960.

The active duty population accounted for 4.5% of Anchorage's population in 1983. When civilian employees and dependents are considered, the total military population stationed on Anchorage bases comprises 15.8% of Anchorage's population. The percentage the active duty personnel represent in Anchorage's population has dropped from 17% to 11% and to 6.4% in 1960, 1970, and 1980, respectively.

Impacts of military installations on a regional or local economy vary considerably. Those installations with large numbers of civilian employees deliver greater benefits than do other installations because civilians spend much more of their income in the local eoncomy than do uniformed personnel. Positive benefits to a local economy are greater in the urban areas of the state than in the rural areas because the self-sufficiency of the remote bases are greater and are therefore more insulated from the local economy. The communities that appear to benefit the greatest from the military presence in Alaska are Fairbanks, Kodiak, and Anchorage.

ALASKA

By Ed Eboch

Nonagricultural wage and salary employment made seasonal gains in July as the fishing season began in earnest and tourism continued to contribute to summer employment growth. While construction employment was up from last month the year to year drop in employment and declines in average weekly hours suggest some weakness developing in the construction industry (see Hours and Earnings). Weakness in employment continued in the forest products industry and government employment dropped as schools closed for the summer. The unemployment rate dropped to 9.1% but was slightly above July 1983 even though there was year to year growth in employment.

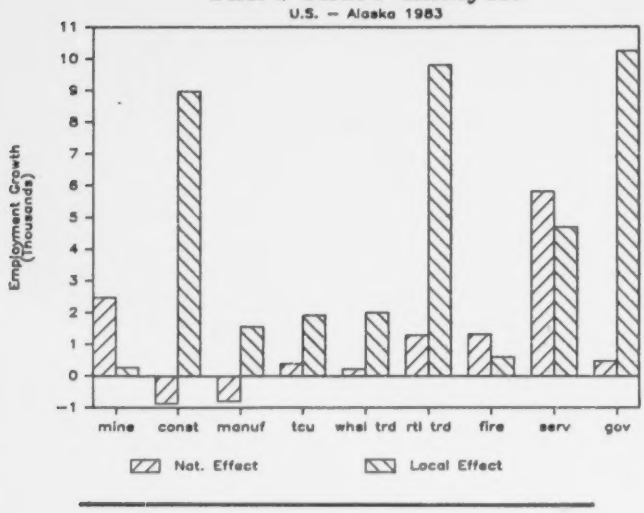
Shift/Share Analysis

A technique used to analyze the economic base of a region and to identify reasons for growth or industries for potential growth, is called shift/share analysis. The following is a brief discussion of shift/share analysis with a comparison of Alaska's percentage of employment by industry compared to the U.S. nationwide percentage of employment by industry. By comparing what has happened nationwide with what has happened in Alaska from 1978 to 1983 we can draw some conclusions about Alaska's economy and industries that offer potential for growth.

Three factors are posited as the reasons for growth in a subregion of a country's economy. The first factor is the amount of growth in a smaller region, such as Alaska, that would be due to growth nationwide. If the U.S. as a whole is growing one would expect that growth to have a positive impact on Alaska's economic growth. Therefore as employment nationwide grows Alaska's employment would grow.

A second factor or component that explains the reasons for growth is called industrial mix. This indicates the portion of change that is attributable to the change in the industry being analyzed. Some industries expand or contract more rapidly than other industries or the nation as a whole. The industry mix indicates whether that industry was a fast growth or slow growth industry nationally when compared to overall growth in employment in the U.S. economy. Thus the second factor to explain employment growth is the change in an industry's employment in the region attributable to overall growth or decline of that industry nationally.

The third factor that causes the economy to grow is the regional or local economic conditions. It describes the extent to which factors unique to the local area have caused growth or decline in employment in an industry. The local component aids in identifying a region's economic strengths. Employment in an industry that is proportionally greater in an area than



that experienced nationwide suggests that there are certain features locally that favor that industry. The following table and graph is a shift/share comparison of Alaska's economy relative to the United States. From the information provided it is possible to identify where Alaska has outperformed the United States as a whole and where there may be potential for further growth.

Growth in Alaska employment is broken down into growth due to national growth, growth due to changes in national industry mix, and growth due to local factors (See Table). The first two factors, growth due to national growth and change in industry mix, is the growth we would have expected if Alaska employment by industry had grown at the same rates as the U.S. Because Alaska's economy grew much more rapidly than the U.S. economy, there is strong positive growth in employment due to local factors in all major industry categories in Alaska.

By examining the vertical distribution, or percent of total employment, of each industry we get a measure of how important each industry is to Alaska's economy. The coefficient of specialization is a measure of the industry's employment relative to the U.S. If the coefficient of specialization is greater than one then that industry has a greater proportion of employees than is typical nationwide.

In mining, for example, employment grew at a 20% rate from 1978 to 1983 nationwide while Alaska mining employment grew at a 50% rate. By looking at vertical distribution we see that mining employment in Alaska

Shift/Share Analysis

	U.S.* Emp. 1979	U.S.* Emp. 1983	% Change	Alaska Emp. 1978	Alaska Emp. 1983	% Change
Mining	851.0	1021.0	19.98	5517	8276	50.01
Construction	4228.8	3947.7	6.65	12147	20259	66.78
Manufacturing	20505.4	18678.0	8.91	11398	12167	6.75
Trans. Comm. & Utilities	4922.8	4941.2	0.37	16240	18555	14.25
Wholesale Trade	4969.0	5232.0	5.29	5718	7955	39.12
Retail Trade	4572.5	15280.6	4.86	22892	33995	48.50
Fin.-Insurance & R.E.	4724.3	5454.0	15.45	8617	10546	22.39
Services	6252.0	19680.0	21.09	28387	38903	37.05
Government	15672.0	15744.0	0.46	51576	62304	20.80
State	3473.5	3636.0	4.68	14376	18822	30.93
Local	9445.5	9356.0	0.95	19083	25693	34.64
Total Nonag. Employment	86697.8	89978.5	3.78	162492	212960	31.06

* Thousands

	Growth Due to Total National Growth	Due to Change in Natl. Industry Mix	Growth Due to Local Factors	1983 U.S. Vertical Dist.	1983 Alaska Vertical Dist.	Coef. of Spec.
Mining	209	893	1657	0.0113	0.0389	3.4248
Construction	460	-1267	8919	0.0439	0.0951	2.1683
Manufacturing	431	-1447	1785	0.2076	0.0571	0.2752
Trans. Comm. & Utilities	651	-554	2254	0.0549	0.0871	1.5866
Wholesale Trade	216	86	1934	0.0581	0.0374	0.6424
Retail Trade	866	246	9991	0.1698	0.1596	0.9400
Fin.-Insurance & R.E.	326	1005	598	0.0606	0.0495	0.8170
Services	1074	4913	458	0.2187	0.1827	0.8352
Government	1952	-1715	10491	0.1750	0.2926	1.6720
State	544	129	3773	0.0404	0.0884	2.1872
Local	722	-903	6791	0.1040	0.1206	1.1603
Total Nonag. Employment	6149	0	44319	1.0000	1.0000	

is nearly 4% of total employment versus just over 1% for the U.S. The coefficient of specialization indicates Alaska's mining employment to be over three times that of the U.S. as a percent of total employment. Obviously, local factors are important in determining the growth in mining employment in Alaska.

Local factors are very important in determining to what extent a basic industry, such as mining, results in greater or lesser employment as a percentage of total employment than found nationwide. However, in the support industries one would expect to find employment as a percent of

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ALASKA

	P/	R/	CHANGES FROM:		
	7/84	6/84	7/83	6/84	7/83
Nonag. Wage & Salary	234300	225700	233200	8600	1100
Mining	8100	8100	8700	0	-600
Construction	23600	21700	24900	1900	-1300
Manufacturing	20400	14500	21900	5900	-1500
Food & Kindred Prod.	14600	8400	15800	6200	-1200
Lumber & Paper Prod.	2600	3000	3000	-400	-400
All Other Mfg.	3200	3100	3100	100	100
Trans. Comm. & Utilities	20500	20000	20200	500	300
Trucking & Whseing.	2600	2500	2400	100	200
Water Transportation	1700	1500	1800	200	-100
Air Transportation	6500	6300	6500	200	0
Other Trans. Comm. & Utilities	9700	9700	9500	0	200
Trade	45800	45000	44200	800	1600
Wholesale	8900	8700	8400	200	500
Retail	36900	36300	35800	600	1100
General Merchandise & Apparel	5300	5100	5000	200	300
Food Stores	6100	6000	5800	100	300
Eating & Drinking Places	13000	12800	12800	200	200
Other Retail Trade	12500	12400	12200	100	300
Finance-Ins. & R. Estate	11500	11300	11100	200	400
Services & Misc.	42800	41600	41200	1200	1600
Government	61600	63500	61000	-1900	600
Federal	18600	18500	18400	100	200
State	18700	18900	18300	-200	400
Local	24300	26100	24300	-1800	0

Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark Date March 1983.

P/ Denotes premilinary estimates.

R/ Denotes revised estimates.

LABOR FORCE BY REGION AND CENSUS DIVISION

	Labor Force			Unemployment			Rate			Employment		
	P 7/84	R 6/84	7/83	P 7/84	R 6/84	7/83	P 7/84	R 6/84	7/83	P 7/84	R 6/84	7/83
Alaska Statewide	256070	249017	249544	23361	24682	22276	9.1	9.9	8.9	232709	224335	227268
Anchorage-Matsu Region	129960	128028	123787	9865	10356	9338	7.6	8.1	7.5	120095	117672	114449
Anchorage	117345	115534	111585	8379	8767	7742	7.1	7.6	6.9	108966	106767	103843
Matanuska-Susitna	12615	12494	12202	1486	1589	1596	11.8	12.7	13.1	11129	10905	10606
Gulf Coast Region	31997	28736	30789	3019	3311	2499	9.4	11.5	8.1	28978	25425	28290
Cordova	1633	1453	1588	82	92	74	5.0	6.3	4.7	1551	1361	1514
Kenai	16791	15105	16046	2026	2150	1632	12.1	14.2	10.2	14765	12955	14414
Kodiak	6974	6234	6696	357	428	236	5.1	6.9	3.5	6617	5806	6460
Seward	2286	2095	2230	220	282	213	9.6	13.5	9.6	2066	1813	2017
Valdez	4313	3849	4229	334	359	344	7.7	9.3	8.1	3979	3490	3885
Interior Region	34082	33246	33219	4629	4467	4501	13.6	13.4	13.5	29453	28779	28718
Fairbanks	27875	27204	27256	3868	3747	3824	13.9	13.8	14.0	24007	23457	23432
Southeast Fairbanks	2709	2619	2631	301	266	281	11.1	10.2	10.7	2408	2353	2350
Upper Yukon	881	846	829	163	144	128	18.5	17.0	15.4	718	702	701
Yukon-Koyukuk	2617	2577	2533	297	310	268	11.3	12.0	10.6	2320	2267	2265
Northern Region	11298	11502	12055	1054	1311	1116	9.3	11.4	9.3	10244	10191	10939
Barrow-North Slope	2934	2957	3181	171	208	230	5.8	7.0	7.2	2763	2749	2951
Kobuk	3643	3679	3837	464	516	442	12.7	14.0	11.5	3179	3163	3395
Nome	4721	4866	5037	419	587	444	8.9	12.1	8.8	4302	4279	4593
Southeast Region	34599	34374	35198	3811	3933	3414	11.0	11.4	9.7	30788	30441	31784
Angoon	498	505	499	90	102	78	18.1	20.2	15.6	408	403	421
Haines	1137	1166	1212	98	139	140	8.6	11.9	11.6	1039	1027	1072
Juneau	12413	12286	12640	1238	1235	1103	10.0	10.1	8.7	11175	11051	11537
Ketchikan	7717	7319	7435	1240	915	749	16.1	12.5	10.1	6477	6404	6686
Outer Ketchikan	882	909	892	119	155	104	13.5	17.1	11.7	763	754	788
Prince of Wales	1601	1631	1726	176	223	255	11.0	13.7	14.8	1425	1408	1471
Sitka	4838	4873	5069	323	409	408	6.7	8.4	8.0	4515	4464	4661
Skagway	1629	1660	1848	123	171	293	7.6	10.3	15.9	1506	1489	1555
Wrangell-Petersburg	3884	4025	3877	404	584	284	10.4	14.5	7.3	3480	3441	3593
Southwest Region	14134	13131	14466	983	1304	1408	7.0	9.9	9.7	13151	11827	13058
Aleutian Islands	3711	3376	3733	135	160	182	3.6	4.7	4.9	3576	3216	3551
Bethel	4622	4352	4771	438	590	617	9.5	13.6	12.9	4184	3762	4154
Bristol Bay Borough	489	463	501	17	39	32	3.5	8.4	6.4	472	424	469
Bristol Bay	1851	1716	1847	85	128	93	4.6	7.5	5.0	1766	1588	1754
Kuskokwim	1271	1188	1308	130	162	175	10.2	13.6	13.4	1141	1026	1133
Wade Hampton	2190	2036	2306	178	225	309	8.1	11.1	13.4	2012	1811	1997

P = Preliminary 1983 Benchmark

R = Revised

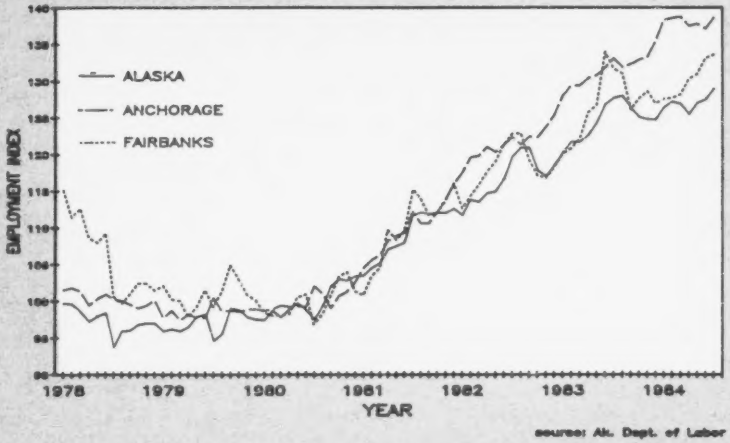
Federal guidelines require the use of unrounded labor data, adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor; because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature; meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's bush localities have proportionately more of these discouraged workers.

total employment to be very close to the national average. It will differ slightly because of local conditions-i.e., closeness of areas that offer substitute sources of goods and services and the fact that different basic industries create more or less secondary and tertiary jobs. Regardless of these differences, Alaska appears to have ample room for growth in trade, finance, insurance and real estate, and in services.

One support industry in Alaska that has a greater proportional share of employment than nationwide is transportation, communication and utilities. Analyzing the industry in detail we see that water and air transportation employment is well above the nationwide percentages while trucking and warehousing employment is below the nationwide percentages. Given Alaska's unique geographic characteristics these results are not surprising and easily explained.

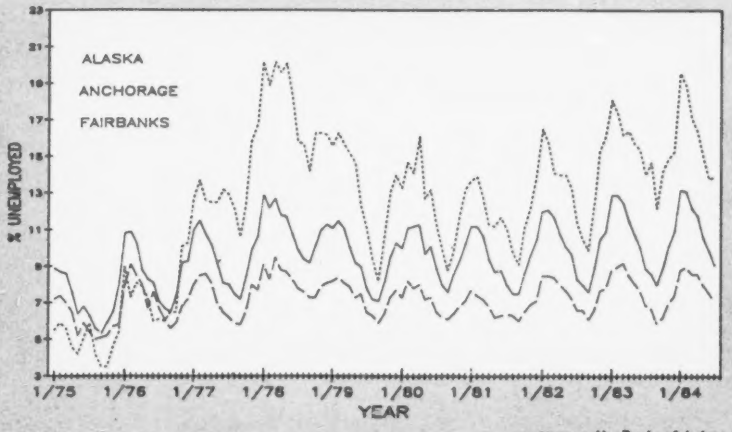
While the basic driving force of Alaska's economy-oil revenues-are unlikely to continue to grow and growth in mining and government employment are unlikely to be sustained in the future, there appears to be opportunities in the support sectors for additional employment. If Alaska's support industries gradually expand so that employment in these industries approach the national percent of total employment this growth could offset declines in areas such as construction. One word of caution in using shift/share analysis should be noted. It is just one tool in analyzing Alaska's economy. Other methodology is available to make such analyses and should be used with shift/share to assure the best results when analyzing or forecasting the state's economic future.

Composite Nonag. Employment Indexes
Seasonally Adjusted
1978 to Present



source: Ak. Dept. of Labor

UNEMPLOYMENT RATES
NOT SEASONALLY ADJUSTED
1975 to Present



source: Ak. Dept. of Labor

ANCHORAGE/MATSU

By Greg Huff

Anchorage July Employment Picture

In July, seasonally induced increases in employment are in full swing. Following the lead of the construction and seafood processing industries Anchorage nonagricultural wage and salary employment increased by 2,250 jobs over June's level and 4,350 jobs over the July 1983 level. Also in July a clearer pattern of the current year's employment trends has been established. Employment for the first seven months of 1984 was up an average of 5.9% over comparable 1983 employment levels. The average growth has been showing signs of weakness. The average employment growth has declined as the year has progressed. For example, employment levels were up 8.1% in January and 5.4% in May. Although there has been a general slide in employment growth in 1984 the year will end with average employment substantially above that of 1983 in Anchorage.

Employment in Anchorage's mining industry has bucked the overall positive employment trend and has fallen below year ago levels. This is due to declines in drilling and exploration activities. North Slope oil drilling activity was down from 9 rigs last year to 7 rigs this July. Mineral mining exploration remains in a slump as a result of the stagnant worldwide minerals market. Mining employment will likely remain slightly below last years levels for most of the remainder of the year. As the winter oil exploration season picks up the picture for mining employment should brighten. Generally, among the operating oil companies there is nearly a 1 to 1 ratio of Anchorage support employees to North Slope operating personnel. With continued exploration and development of marginal North Slope fields and continued recovery enhancement operations at existing fields Anchorage oil employment should get back on the growth track.

Gains in construction employment in July were below normal June to July increases, but edged out last year's levels by 200 jobs. This construction employment trend is a result of the slower residential market. Compared to last year, the dollar valuation of residential permits in 1984 is down from $433.5 million in 1983 to $242.4 million. The declines in the residential market are strongest in the multifamily or condo segment of the market with value of residential permits down $117.6 data for new and remodeled commercial projects points the other direction. As of July, new and remodel commercial permit valuations were up 26% and 133%, respectively. Road and other heavy construction activity are also above year ago levels contributing to the overall growth in construction employment.

The transportation, communications and utilities industrial group had

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE

	P/ 7/84	R/ 6/84	7/83	CHANGES FROM: 6/84	7/83
Nonag. Wage & Salary	113500	111250	109150	2250	4350
Mining	3500	3550	3650	-50	-150
Construction	11400	10650	11200	750	200
Manufacturing	3650	2900	3500	750	150
Food & Kindred Prod.	1400	800	1400	600	0
Other Mfg.	2250	2100	2100	150	150
Trans. Comm. & Utilities	9650	9500	9200	150	450
Trucking & Whseing.	1300	1250	1250	50	50
Water Transportation	350	350	350	0	0
Air Transportation	4050	3950	3950	100	100
Other Trans. Comm. & Utilities	3950	3950	3650	0	300
Trade	27700	27750	26300	-50	1400
Wholesale	6500	6450	6050	50	450
Retail	21200	21300	20250	-100	950
General Merchandise	1800	1800	1800	0	0
Food Stores	2700	2800	2500	-100	200
Eating & Drinking Places	8100	8100	7850	0	250
Other Retail Trade	8600	8600	8100	0	500
Finance-Ins. & R. Estate	7900	7650	7300	250	600
Services & Misc.	24600	24050	23700	550	900
Government	25100	25200	24300	-100	800
Federal	10250	10250	10050	0	200
State	6050	6150	6100	-100	-50
Local	8800	8800	8150	0	650

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
ANCHORAGE-MATSU

	P/ 7/84	R/ 6/84	7/83	CHANGES FROM: 6/84	7/83
Nonag. Wage & Salary	119800	117200	114800	2600	5000
Mining	3600	3550	3750	50	-150
Construction	12300	11500	12200	800	100
Manufacturing	3750	3000	3600	750	150
Trans. Comm. & Utilities	10200	10050	9750	150	450
Trade	29000	29000	27550	0	1450
Finance-Ins. & R. Estate	8250	8000	7600	250	650
Services & Misc.	25550	24850	24700	700	850
Government	27150	27250	25650	-100	1500

employment increases of 150 over the month and 450 over the year. The bulk of the yearly increase was rooted in the communication and utility sectors which is playing catchup to the population boom of recent years. The telephone, gas, and electric utilities are all reporting substantial growth in their service areas.

Air transportation registered a monthly increase of 100 jobs in July in response to the peak tourist and fishing seasons. Employment levels in Juy also reflect over the year increases in the number of passengers and tons of freight flown in and out of the Anchorage International Airport. Airport statistics for July show an average increase of 4.5% in passenger load and 8.5% in frieght. Water transportation employment remained settled at year ago levels. Overall tonnage through the Port of Anchorage is up slightly, but general cargo tonnage is down. Stevedore employment is primarily influenced by general cargo levels.

Wholesale and retail trade employment in July dropped from June's levels because of declines in food store employment. However, trade contributed the largest single share of new jobs in Anchorage over the year and will likely continue this trend well into 1985. Services, the next largest single contributor of new jobs in the Anchorage area, registered employment gains of 3.8% in July compared to the previous July. The bulk of these jobs were in the health related sectors and business and social services such as accounting and childcare.

The finance, insurance, and real estate industrial group was the fastest growing sector in Anchorage during the past month. This sector has benefited from the rapidly growing economy of the past 4 years. The real estate sector, however, is now feeling the negative impacts of a slower residential home buying market.

Declines in state education employment in July forced total government employment down slightly from June's levels. The summer vacation also induced a drop in the local education workforce but other local government sectors had seasonal increases which offset the seasonal employment declines in the Anchorage school district. The large yearly increases in local government employment is in response to the rapidly growing population of Anchorage. State government employment over the year is down slightly because the amount of temporary help hired this year is less than last year. Modest growth is expected in state government for the year.

FAIRBANKS/INTERIOR

By Neal Fried

The Interior's economy, including Fairbanks, received a stimulus this year from state budget expenditures. Fairbanks secured approximately $112 million, and the remainder of the Interior received $83 million in capital project funds. This is a record for Fairbanks and was the second largest for the Interior since the massive capital budgets began in 1981. More than 93% of these funds are earmarked for construction. This will insure a strong public construction season in 1985 and 1986 for both areas.

The annual source of income, which began to flow from Juneau in 1980 with the famous Christmas tree bills, has quickly become a good portion of the area's economic lifeblood. These huge capital expenditures, along with loans, permanent fund dividends, and tax relief helped propel the Interior's economy into a growth mode and then helped to sustain the expansion. These expenditures have yet to have the effect of diversifying the basic industries of the economy, but have helped instead to expand the secondary sector of the economy such as trade, services, finance, insurance, and real estate and a portion of government.

The source of the funds has remained largely oil tax revenues. If these funds begin to decline, the economy will likely feel the negative effects as it felt the positive effects when expenditures began to grow in 1980. Few industries will be left unaffected by loss of these funds. As long as these revenues flow, however, the economy will likely continue to grow and be healthy.

Construction, will be the major beneficiary of these capital expenditures. These funds will affect construction for several years to come as many projects will take a number of seasons to complete. Planning and design of construction projects consume time, along with administrative, legal and other possible problems which may delay these projects.

These appropriations include a number of large multimillion dollar items. Altogether, there were more than 49 appropriations of over $1 million for Fairbanks and the Interior. These projects include $15 million for a Fairbanks Multipurpose Activity Center, $5 million for an Administrative Office Building at the University, $1.5 million for school improvements in Chalkyitisik, $14.1 million for the Alaska Highway, and $3 million for an alcohol treatment facility in Fairbanks. Some of the allocations are very small items such as $75,000 for a hockey tournament and $1,600 for Tok emergency medical equipment. There are literally hundreds of separate allocations. If a person desires to get a list of these projects, they can be found in 7 different capital projects bills available at any legislative information office.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
FAIRBANKS

	P/ 7/84	R/ 6/84	7/83	CHANGES FROM: 6/84	7/83
Nonag. Wage & Salary	29400	28700	29050	700	350
Mining	350	350	350	0	0
Construction	3700	3150	3650	550	50
Manufacturing	600	600	650	0	-50
Trans. Comm. & Utilities	3000	3050	3100	-50	-100
Trucking & Whseing.	550	600	500	-50	50
Air Transportation	750	750	750	0	0
Other Trans. Comm. & Utilities	1700	1700	1850	0	-150
Trade	6050	5950	6100	100	-50
Wholesale	900	900	900	0	0
Retail	5150	5050	5200	100	-50
Gen. Merchandise & Apparel	450	450	450	0	0
Food Stores	850	850	850	0	0
Other Retail Trade	3850	3750	3900	100	-50
Finance-Ins. & R. Estate	1050	1050	1000	0	50
Services & Misc.	5800	5300	5650	500	150
Government	8850	9250	8550	-400	300
Federal	2800	2800	2650	0	150
State	3650	3650	3600	0	50
Local	2400	2800	2300	-400	100

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
INTERIOR

	P/ 7/84	R/ 6/84	7/83	CHANGES FROM: 6/84	7/83
Nonag. Wage & Salary	33350	32550	32750	800	600
Mining	500	500	500	0	0
Construction	3800	3200	3750	600	50
Manufacturing	650	650	700	0	-50
Trans. Comm. & Utilities	3750	3750	3800	0	-50
Trade	6550	6400	6550	150	0
Finance-Ins. & R. Estate	1150	1100	1100	50	50
Services & Misc.	6200	5750	6000	450	200
Government	10750	11200	10350	-450	400

GULF COAST

By Neal Fried

The Gulf Coast economy continues to receive a boost from state revenues. In 1983 the region received approximately $91 million in capital budget items. The 1984 figure is approximately $124 million, smaller than either 1981 or 1982 unless the $50 million allocation for the Bradley Lake Hydro Project is included in the 1984 figure. If the hydro project is included, 1984 would be a record year for state appropriations for the region.

Since these huge budgets began in 1981, this revenue has become a dominant economic force in the region. Revenue to the region has not only been in the form of capital projects but also in loans, subsidies, dividend checks, and tax relief. After the completion of the oil pipeline in 1977 the region was basically in the economic doldrums until 1981 when income from the state began to boost the economies of the region. Since 1981, some of the region's economies have been hit hard by poor fish harvests but they have suffered far less than they would have had state revenues not been available. Two examples of this are Cordova and Kodiak where employment has remained stable despite huge losses in fishery employment.

Some of this income from state revenues has been used to diversify the region's economy and expand the existing economic infrastructure. An example of diversification is the Marine Industrial Center in Seward. The expansion of the port facilities is an example of supplementing existing infrastructures. It is too early to judge the success of these projects on the local economies.

This income flow has also helped boost the secondary sector of the economy in trade, services, construction, government, and finance, insurance and real estate. When expenditures from Juneau begin to decline these industries are also likely to suffer losses just as they grew when expenditures began to grow rapidly.

The industry which benefits the most from these capital expenditures is construction. There were more than 120 appropriations of which 26 projects were in excess of $1 million. These projects include $8 million for a hospital in Cordova, $14.5 million for the second phase of the Near Island Bridge in Kodiak, $10.5 million for the Copper Center Bypass on the Richardson Highway and $15 million for the Seward Correctional Center. These 1984 allocations will insure strong public construction seasons for at least the next 2 years.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
GULF COAST

			CHANGES FROM:		
	P/ 7/84	R/ 6/84	7/83	6/84	7/83
Nonag. Wage & Salary	24600	21550	24200	3050	400
Mining	700	700	700	0	0
Construction	2500	2200	2350	300	150
Manufacturing	6650	3950	6750	2700	-100
Food & Kindred Prod.	6000	3200	6000	2800	0
All Other Mfg.	650	750	750	-100	-100
Trans. Comm. & Utilities	2500	2450	2500	50	0
Trade	3600	3550	3500	50	100
Wholesale	600	600	600	0	0
Retail	3000	2950	2900	50	100
Finance-Ins. & R. Estate	500	500	500	0	0
Services & Misc.	3500	3300	3400	200	100
Government	4650	4900	4500	-250	150
Federal	600	550	600	50	0
State	1550	1550	1450	0	100
Local	2500	2800	2450	-300	50

SOUTHEAST ALASKA

By John Boucher

Southeast Alaska nonagricultural wage and salary employment increased in July by 350 jobs to 30,900. The increase represented 1.1% growth in employment over the month. Last July employment in Southeast Alaska stood at 32,050, a 3.5% drop in employment from last year.

A myriad of factors have contributed to the over the year drop in employment, the largest being lower manufacturing and construction employment. In manufacturing, two factors contributed to the over the year drop, the closure of the Ketchikan pulp mill in June and over counting of seafood processing employment in the ES-202 in 1983. Although Research and Analysis has not yet published revised employment numbers for 1983, an overreporting of seafood processing employment in the Southeastern region has existed since the second quarter of 1980. While there appears to be a drop of 700 jobs in food and kindred products over the year, the 2,000 jobs reported for July in the region is actually very comparable to the corrected historical levels for Southeast Alaska food and kindred products employment. Food and kindred products employment in the region is expected to continue showing dramatic declines in comparison to year ago levels until the 1984 benchmarking takes place in January 1985. Should there be a change in the status of the year ago number prior to the benchmark it will be fully explained in *Alaska Economic Trends.*

Construction employment was up over the month in the region but down 10% from last year's record high. Heavy construction is down significantly from last year because of the finishing of two large hydroelectric projects. Residential construction in Juneau, a big factor in 1983's construction surge, is going fairly strongly but not at the breakneck pace of last year. Major office and retail complexes in the capital city have either been completed or are in the final stages of completion. While public construction projects are providing a significant amount of employment, the private sector overall has not been as active during this construction season as it was during last year.

Despite the decrease in activity compared to last year, both construction and food and kindred products increased their total employment during the month. All industries in the region experienced growth in employment during July with the exception of retail trade and government. Retail trade decreased due to two factors, layoffs of initial staff needed for the opening of a large Juneau retail complex and also layoffs at competing stores hurt by the slump in sales due to the grand opening. The decrease in state government employment was attributable to the scaling down of staff assigned to the Alaska Legislature when the legislative session ended.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
BY PLACE OF WORK
SOUTHEAST ALASKA

	P/	R/	CHANGES FROM:		
	7/84	6/84	7/83	6/84	7/83
Nonag. Wage & Salary	30900	30550	32050	350	-1150
Construction	2250	2050	2500	200	-250
Manufacturing	4300	3900	5300	400	-1000
Food & Kindred Prod.	2000	1300	2700	700	-700
Lumber & Paper Prod.	2050	2350	2350	-300	-300
All Other Mfg.	250	250	250	0	0
Trans. Comm. & Utilities	2300	2250	2400	50	-100
Trade	4950	5050	4900	-100	50
Wholesale	500	450	500	50	0
Retail	4450	4600	4400	-150	50
Finance-Ins. & R. Estate	1050	1050	1000	0	50
Mining, Services & Misc.	4600	4550	4650	50	-50
Government	11450	11700	11300	-250	150
Federal	2350	2300	2400	50	-50
State	5500	5650	5450	-150	50
Local	3600	3750	3450	-150	150

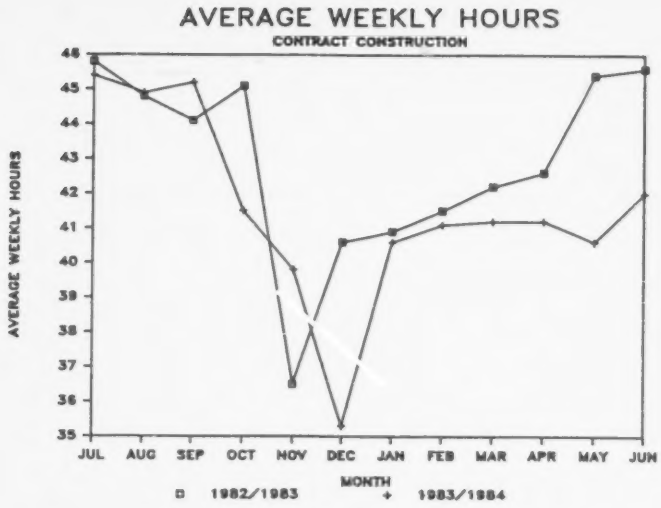
HOURS AND EARNINGS

By Kathleen Thomas

Average weekly hours of the food and kindred products sector of manufacturing jumped 32% over May and was followed by a concomitant drop in average hourly earnings of 10%. Historically, as seasonal weekly hours increase in the food and kindred sector, average hourly earnings decrease as more temporary employees are hired. This phenomenon affects aggregate manufacturing due to the weighting factors involved in calculating total manufacturing. The lumber and paper products sector showed little change in average hourly earnings or average weekly hour despite a maintenance closing of a major mill during the report period.

Construction

Average weekly hours for contract construction, though up 4% from May, dropped 8% from the same period a year ago, the second major decrease in a row. So far, total employment has not decreased as would be indicated by the drop in hours. Figure 1 shows total contract construction employment by month as being very similar for both yearly time periods with no major deviations. For each yearly period employment is seasonal with a smooth transition from the peak that occurs in August or September and the trough that occurs in January or February. The yearly trend for average



weekly hours is not as smooth as for employment (Figure 2). For both years average weekly hours drop precipitously in November or December only to rise just as precipitously after the holiday season. Since December of 1983 average weekly hours are below that of the past year. A significant divergence between 1983 and 1984 starts developing in April. By May, average weekly hours for 1984 are 10% lower than the like period in 1983 and in June average weekly hours are 8% lower than June of 1983. Using average weekly hours as an indicator, construction activity appears to be slowing from its high level of past years far more than is indicated by drops in employment. If average weekly hours continue below the level of last year then it is probable that employment in this industry will continue to decline.